

I Claim:

1. A panel for connection with other panels, comprising:
  - a. a rectilinear base member having outer edges;
  - b. a first rectilinear side member extending from one edge of the base member, the first side member having a first lip extending from an outward edge of the first side member and away from the base member, the first side member further having a second lip extending from an outward edge of the first lip and toward the base member and at an angle between about zero and 90 degrees with respect to the first lip; and
  - c. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending toward the base member.
2. The panel of claim 1, wherein the panel is modular, and wherein the first side member extends generally perpendicularly from the base member, the second side member extends generally perpendicularly from the base member, and the third lip extends generally perpendicularly from the second side member.
3. The panel of claim 1, wherein the panel is a vertically disposed wall panel.
4. The panel of claim 1, wherein the panel is a horizontally disposed ceiling panel.

5. The panel of claim 1, wherein the panel is connectible with at least one other panel without fasteners.

6. The panel of claim 5, wherein the panel is connectible to form a vertically disposed wall.

7. The panel of claim 5, wherein the panel is connectible to form a horizontally disposed ceiling.

8. The panel of claim 5, wherein the panel is connectible to form a booth with at least two vertically disposed walls and a horizontally disposed ceiling surrounding an at least partially enclosed area.

9. The panel of claim 8, wherein the booth is a spray booth.

10. A structural member such as a wall or ceiling, comprising:

a. a first panel, including:

i. a rectilinear base member having outer edges;

ii. a first rectilinear side member extending from one edge of the base member, the first side member having a first lip extending from an outward edge of the first side member and away from the base member, the first side member further having a second lip extending from an outward

edge of the first lip and toward the base member and at an angle between about zero and 90 degrees with respect to the first lip; and

iii. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending toward the base member; and

b. at least one second panel communicatively connected to the first panel, the at least one second panel including:

i. a rectilinear base member having outer edges;

ii. a first rectilinear side member extending from one edge of the base member, the first side member having a first lip extending from an outward edge of the first side member and away from the base member, the first side member further having a second lip extending from an outward edge of the first lip and toward the base member and at an angle between about zero and 90 degrees with respect to the first lip; and

iii. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending toward the base member.

11. The structural member of claim 10, wherein the first and the at least one second panels are modular and are connected, the third lip of the second panel abutting the second lip of the first panel.

12. The structural member of claim 11, wherein the first side members of the first panel and of the at least one second panel extend generally perpendicularly from the respective base members, the second side members extend generally perpendicularly from the respective base members, and the third lips extend generally perpendicularly from the respective second side members.

13. The structural member of claim 10, wherein the first and at least one second panel are connected to form a linearly configured wall.

14. The structural member of claim 10, wherein the first and at least one second panels are connected to form an angled wall having at least one corner.

15. The structural member of claim 14, further comprising a corner post coupling two panels, the post comprising at least two post walls oriented generally perpendicularly to each other, each post wall including a post wing extending from the post wall and toward each other.

16. The structural member of claim 14, further comprising a corner post coupling two panels, the post comprising at least two post walls oriented substantially perpendicularly to each other, each post wall including a post wing extending substantially perpendicularly from the post wall, at least one of the post wings including a post hook wall extending from the post at least one post wing and at an angle between about zero and 90 degrees with respect to the at least one post wing.

17. The structural member of claim 14, further comprising a corner post coupling two panels, the post comprising a rectilinear post wall including at least two post wings extending toward each other from opposite ends of the post wall, each post wing positioned at an acute angle with respect to the post wall.

18. An enclosure, comprising:

a. at least two panels, each panel including:

i. a rectilinear base member having outer edges;

ii. a first rectilinear side member extending from one edge of the base member, the first side member having a first lip extending from an outward edge of the first side member and away from the base member, the first side member further having a second lip extending from an outward edge of the first lip and toward the base member and at an angle between about zero and 90 degrees with respect to the first lip; and

iii. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending toward the base member; and

b. at least one corner post communicatively connected to at least two panels, the at least one post including at least two post walls oriented substantially perpendicularly to each other, each post wall including a post wing extending from the post wall and toward each other;

whereby the at least two panels and the at least one corner post cooperate to form at least two walls.

19. The enclosure of claim 18, wherein the panels are modular and are connected to the posts, one of the post wings abutting the second lip of one of the at least two modular panels and the other post wing abutting the second lip of the other of the at least two modular panels, and wherein the first side members of the at least two panels extend generally perpendicularly from the respective base members, the second side members extend generally perpendicularly from the respective base members, and the third lips extend generally perpendicularly from the respective second side members.

20. The enclosure of claim 19, further comprising at least one additional modular panel connected to form a linearly configured wall.

21. The enclosure of claim 19, further comprising at least one ceiling panel connected to the at least two walls.

22. A self supporting, fastenerless spray booth comprising:

a. at least one wall comprising at least two wall panels, each wall panel comprising

i. a rectilinear base member having outer edges;

ii. a first rectilinear side member extending from one edge of the base member, the first side member having a first lip extending from an

outward edge of the first side member and away from the base member, the first side member further having a second lip extending from an outward edge of the first lip and toward the base member and at an angle between about zero and 90 degrees with respect to the first lip; and

iii. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending toward the base member; and

b. at least one ceiling comprising at least one ceiling panel comprising:

i. a rectilinear base member having outer edges;

ii. a first rectilinear side member extending from one edge of the base member, the first side member having a first lip extending from an outward edge of the first side member and away from the base member, the first side member further having a second lip extending from an outward edge of the first lip and toward the base member and at an angle between about zero and 90 degrees with respect to the first lip; and

iii. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending from the second side member and toward the base member.

23. The self supporting spray booth of claim 22, wherein each wall panel is modular and wherein the ceiling further includes a panel comprising:

- a. a rectilinear base member having outer edges;
- b. a first rectilinear side member extending from one edge of the base member, the first side member having a slot wall extending downward from an outward edge of the first side member and away from the base member; and
- c. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a lip extending from the second side member and toward the base member.

24. The self supporting spray booth of claim 22, wherein the at least one ceiling panel further includes at least one shoulder wall extending generally perpendicularly from a further edge of the base member, the shoulder wall including a slot wall extending downwardly from an outward edge of the shoulder wall.

25. The self supporting spray booth of claim 22, wherein the first side members of the at least two wall panels extend generally perpendicularly from the respective base members, the second side members extend generally perpendicularly from the respective base members, and the third lips extend generally perpendicularly from the respective second side members.

26. A self supporting, fastenerless spray booth comprising:

- a. at least one wall comprising at least two wall panels, each wall panel comprising



- i. a rectilinear base member having outer edges;
  - ii. a first rectilinear side member extending from one edge of the base member, the first side member having a first lip extending from an outward edge of the first side member and away from the base member, the first side member further having a second lip extending from an outward edge of the first lip and toward the base member and at an angle between about zero and 90 degrees with respect to the first lip; and
  - iii. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending toward the base member; and
- b. at least one ceiling comprising at least one ceiling panel comprising:
  - i. a rectilinear base member having outer edges;
  - ii. a first rectilinear side member extending from one edge of the base member, the first side member having a slot wall extending downward from an outward edge of the first side member and away from the base member; and
  - iii. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a lip extending from the second side member and toward the base member.

27. The self supporting spray booth of claim 26, wherein each wall panel is modular and wherein the ceiling further includes a panel comprising:

- a. a rectilinear base member having outer edges;
- b. a first rectilinear side member extending from one edge of the base member, the first side member having a first lip extending from an outward edge of the first side member and away from the base member, the first side member further having a second lip extending from an outward edge of the first lip and toward the base member and at an angle between about zero and 90 degrees with respect to the first lip; and
- c. a second rectilinear side member extending in substantially the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending from the second side member and toward the base member.

28. The self supporting spray booth of claim 26, wherein the first side members of the at least two wall panels and the at least one ceiling panel extend generally perpendicularly from the respective base members, the second side members extend generally perpendicularly from the respective base members, and the third lips extend generally perpendicularly from the respective second side members.

29. A spray booth comprising:

a. a plurality of panels having opposite ends selectively arrangable in series with opposing ends of adjacent panels being attached together to form a spray booth wall;

b. at least one channel formed at one of the ends of at least one of the panels; and

c. a post securable to an adjacent panel and rotationally engageable within the at least one channel to releasably engage the at least one panel to attach the ends of the adjacent panels.

30. A spray booth in accordance with claim 29 wherein the post includes at least one post wing insertable through a channel opening defined by the at least one end.

31. A spray booth in accordance with claim 29 wherein the at least one channel includes a first lip positioned at the one of the ends, and a second lip oriented at an acute angle with respect to the first lip.

32. A spray booth in accordance with claim 31 wherein the post includes a post wing insertable through a channel opening defined by the at least one end, and wherein the post wing abuts the second lip.

33. A spray booth in accordance with claim 32 wherein the post wing abuts the first lip.

34. A spray booth in accordance with claim 29 wherein the at least one channel includes a first lip positioned at the one of the ends, a second lip projecting from the first lip, and wherein the post includes a post wing insertable through a channel opening defined by the at least one end, the post wing abutting the second lip.

35. A spray booth in accordance with claim 34 wherein the post wing abuts the second lip at a post wing end.

36. A spray booth in accordance with claim 34 wherein the first lip is oriented parallel to the at least one of the panels.

37. A spray booth in accordance with claim 29 wherein the at least one channel includes a first lip positioned at the one of the ends and a second lip defining a hook-corner, and wherein the post is engageable within the at least one channel at the hook-corner.

38. A spray booth in accordance with claim 29 further comprising:
- a. at least two channels, each one formed along a length of one of the ends of the adjacent panels; and
  - b. wherein the post is rotationally engageable within both of the at least two channels.

39. A spray booth in accordance with claim 29,  
wherein the plurality of panels includes at least two panels attached  
end-to-end in series in a perpendicular orientation;  
wherein the at least two panels each include a channel formed  
along opposing ends of the panels, and  
wherein the post includes a Winged-L-shaped coupler, cooperating  
with the opposing channels to removeably hold the panels together.

40. A spray booth according to claim 29:  
wherein the plurality of side panels includes at least two side panels  
attachable end-to-end in series in a co-linear orientation; and  
wherein at least one of the two panels includes at least another  
channel formed at one of the ends opposing the end of the other panel  
wherein the at least one of the two panels is rotationally engageable with  
the other panel at the at least another channel to removeably hold the at  
least two panels together in a co-linear orientation.

41. A spray booth in accordance with claim 40, wherein the at least another  
channel and the post are vertically oriented.

42. A spray booth in accordance with claim 40, wherein the at least another channel extends along a majority of a length of the end of the at least two panels, and locks a majority of the length of the ends of the at least two panels together.

43. A spray booth in accordance with claim 40 wherein the other panel includes a third lip insertable into the at least one channel.

44. A spray booth in accordance with claim 40 wherein the at least another channel includes a first lip and a second lip oriented at an acute angle with respect to the first lip.

45. A spray booth in accordance with claim 44 wherein the other panel includes a third lip insertable through a channel opening of the channel, and wherein the third lip abuts the second lip.

46. A spray booth in accordance with claim 40 further comprising:  
a ceiling panel having at least one slot wherein the ceiling panel engages with at least one of the side panels at the slot.

47. A spray booth in accordance with claim 46 wherein the slot is formed along an end of the top panel and wherein the slot drops over the side of a side panel.

48. A spray booth in accordance with claim 46 wherein the slot extends along a majority of a length of the ceiling panel and locks a majority of the length of the at least one panel.

49. A spray booth in accordance with claim 46 wherein the ceiling panel has two slots and engages with two side panels attached end-to-end in series in a perpendicular orientation.

50. A spray booth in accordance with claim 46 wherein the ceiling panel includes a lip engageable with a second ceiling panel.

51. A spray booth in accordance with claim 46 wherein the ceiling panel includes a second lip extending from a first lip, and wherein the second lip is oriented at an acute angle with respect to the first lip.

52. A spray booth in accordance with claim 30 wherein the post includes a post channel, the adjacent panel rotationally engageable within the post channel to releaseably engage the adjacent panel to the at least one panel.

53. A spray booth in accordance with claim 52 wherein the post channel includes a post hook wall oriented at an acute angle with respect to the post wing.

54. A spray booth in accordance with claim 53 wherein the at least one of the panels includes a third lip which abuts with the post hook wall.

55. A spray booth in accordance with claim 52 wherein the post includes a generally S-shaped coupler, cooperating with the opposing side panels to removeably hold the panels together.

56. A spray booth comprising:

a. a plurality of panels having opposite ends selectively arrangable in series with opposing ends of adjacent panels being attached together to form a spray booth wall;

b. at least one channel formed at one of the ends of at least one of the panels, the at least one channel including a first lip positioned at the one of the ends and a second lip oriented at an acute angle with respect to the first lip; and

c. a post securable to an adjacent panel, the post including a post wing insertable through a channel opening defined by the at least one end, the at least one panel rotationally engageable with the post at the at least one channel wherein the post wing abuts the second lip to engage the end of the at least one panel to the adjacent panel.

57. A spray booth in accordance with claim 56 wherein the post includes a post channel formed opposite the at least one post wing, the adjacent panel rotationally



engageable within the post channel to releaseably engage the adjacent panel to the end of the at least one panel.

58. A spray booth in accordance with claim 57 wherein the post channel includes a second post wing, and a post hook wall oriented at an acute angle with respect to the second post wing.

59. A spray booth in accordance with claim 56 further comprising a top panel having at least one slot wherein the top panel engages with at least one of the panels at the slot.

60. A spray booth in accordance with claim 59 wherein the plurality of panels includes at least two panels attached end-to-end in series and wherein at least one of the two panels includes at least another channel formed at one of the ends opposing the end of the other panel, the at least one of the two panels rotationally engageable with the other panel at the at least another channel to removeably hold the at least two panels together.

61. A spray booth in accordance with claim 59 wherein the top panel includes a channel configured to engage with an adjacent top panel.

62. A spray booth comprising:

at least two adjacent panels having opposite ends being attached together to form a spray booth wall;

at least one channel formed at one of the ends of at least one of the panels, the channel including a first lip positioned at the one of the ends and a second lip oriented at an acute angle with respect to the first lip; and

a post securable to an adjacent panel and removeably receivable within the at least one channel to releasably engage the at least one panel to engage the ends of the adjacent panels.

63. A spray booth in accordance with claim 62 wherein the post includes a post wing having a post wing end insertable through a channel opening defined by the at least one channel, and wherein the post wing end abuts the second lip.

64. A spray booth in accordance with claim 62 further comprising:

- a. at least another channel including a first lip positioned at the one of the ends and a second lip oriented at an acute angle with respect to the first lip; and
- b. wherein the post is removeably receivable within both of the at least two channels.

65. A spray booth in accordance with claim 62,  
wherein the at least two panels are attached end-to-end in series in a perpendicular orientation;

wherein the at least two panels each include a channel formed along opposing ends of the panels, and  
wherein the post includes a Winged-L-shaped coupler, cooperating with the opposing channels to removeably hold the panels together.

66. A spray booth according to claim 62:

wherein the at least two panels are attachable end-to-end in series in a co-linear orientation; and

wherein at least one of the panels includes at least another channel formed at one of the ends opposing the end of the other panel wherein the at least one of the two panels is removeably receivable with the other panel at the at least another channel to removeably hold the at least two panels together in a co-linear orientation.

67. A spray booth according to claim 62 further comprising:

at least another panel are attachable end-to-end in series with at least one of the at least two panels in a co-linear orientation; and

wherein the another panel includes a channel formed at one of the ends opposing the end of at least one of the at least two panels, the other panel having first lip and a second lip oriented at an acute angle with respect to the first lip, the at least one of the at least two panels including a third lip and wherein the third lip abuts the second lip to removeably hold

the another panel to the at least one of the at least two panels together in a co-linear orientation.

68. A spray booth according to claim 62 further comprising a top panel having at least one slot wherein the top panel engages with at least one of the panels at the slot.

69. A spray booth structural member such as a wall or ceiling comprising:  
at least two adjacent panels having opposite side ends being attached together to form a spray booth wall; and  
at least one channel formed at one of the ends of one of the panels opposing the end of the adjacent panel, the at least one channel including a first lip and a second lip oriented at an acute angle with respect to the first lip, the adjacent panel having a third lip abutting the second lip to removeably hold the adjacent panels together in a co-linear orientation.

70. A spray booth in accordance with claim 69 wherein the at least one of the panels is rotationally engageable with the adjacent panel at the at least one channel.

71. A spray booth in accordance with claim 69 wherein the booth further comprises a top panel having at least one slot wherein the top panel engages with at least one of the panels at the slot.

72. A method of assembling an enclosure comprising the steps of:
- a. providing at least two panels, each panel including:
    - i. a rectilinear base member having outer edges;
    - ii. a first rectilinear side member extending perpendicularly from one edge of the base member, the first side member having a first lip extending from an outward edge of the first side member and away from the base member and at an angle between about m and n degrees with respect to the first side member, the first side member further having a second lip extending from an outward edge of the first lip and toward the base member and at an angle between about o and p degrees with respect to the first lip; and
    - iii. a second rectilinear side member extending perpendicularly, in the same direction as the first side member, from an opposite edge of the base member, the second side member having a third lip extending perpendicularly from the second side member and toward the base member;
  - b. providing at least one corner post communicatively connectable to at least two panels, the at least one post including at least two post walls oriented substantially perpendicularly to each other, each post wall including a post wing extending substantially perpendicularly from the post wall and toward each other; and
  - c. communicatively connecting the at least two panels together with the at least one corner post to form at least two walls of the enclosure.

73. The method of assembly of claim 72 wherein the panels are modular, one of the post wings abutting the second lip of one of the at least two modular panels and the other post wing abutting the second lip of the other of the at least two modular panels.

74. The method of assembly of claim 73 further comprising at least one additional modular panel connected to form a linearly configured wall.

75. The method of assembly of claim 73 further comprising at least one ceiling panel connected to the at least two walls.

76. A method of assembling a spray booth comprising the steps of:

- providing a plurality of side panels having opposite side ends selectively arangable in series with opposing side ends of adjacent side panels, at least one channel formed at one of the side ends of at least one of the side panels, and a post securable to an adjacent side panel and rotationally engageable within the at least one channel to releasably engage the at least one side panel;
- rotationally engaging the post within the at least one channel; and
- securing an adjacent side panel to the post to engage the side ends of the adjacent side panels to form a spray booth wall.

77. A method of assembling a spray booth in accordance with claim 73 further comprising the steps of providing a top panel having at least one slot and engaging the top panel with at least one of the side panels at the slot.

78. A method of assembling a spray booth comprising the steps of:

providing a plurality of side panels having opposite side ends selectively arrangable in series with opposing side ends of adjacent side panels, at least one channel formed at one of the side ends of at least one of the side panels, the channel including a first lip positioned at the one of the side ends and a second lip oriented at an acute angle with respect to the first lip, and a post securable to an adjacent side panel and removeably receivable within the at least one channel to releasably engage the at least one side panel to engage the side ends of the adjacent side panels;

arranging the side panels in series;

removeably receiving the post within the at least one channel; and

securing an adjacent side panel to the post to engage the side ends of the adjacent side panels to form a spray booth wall.

79. A method of assembling a spray booth in accordance with claim 75 further comprising the steps of providing a top panel having at least one slot and engaging the top panel with at least one of the side panels at the slot.

80. A method of assembling a spray booth in accordance with claim 76 wherein the plurality of side panels includes at least two side panels attachable end-to-end in series and wherein at least one of the two side panels includes at least another channel formed at one of the side ends opposing the side end of the other side panel, further comprising the step of rotationally engaging the at least one of the two side panels with the other side panel at the at least another channel to removeably hold the at least two side panels together in a co-linear orientation.

81. A self-supporting, fastenerless enclosure comprising:

- a plurality of side panels having opposite side ends selectively arrangable in series with opposing side ends of adjacent side panels being attached together to form a wall of the enclosure;

- at least one channel formed at one of the side ends of at least one of the side panels, the channel including a first lip positioned at the one of the side ends and a second lip oriented at an acute angle with respect to the first lip;

- a post securable to an adjacent side panel and removeably receivable within the at least one channel to releasably engage the at least one side panel to engage the side ends of the adjacent side panels;
- and

- at least one top panel having at least one slot wherein the top panel engages with at least one of the side panels at the slot.



82. The enclosure in accordance with claim 81 further comprising:

a. at least another channel including a first lip positioned at the one of the side ends and a second lip oriented at an acute angle with respect to the first lip; and

b. wherein the post is removeably receivable within both of the channels.

83. A modular panel for use in conjunction with like modular panels for assembling a structural member of an enclosure, the modular panel comprising:

a sheet of material having first and second sides;

a first channel formed at one of the sides, the channel having a channel opening, a first lip, and a second lip oriented at an acute angle with respect to the first lip; and

a second channel formed at the other of the sides, the second channel having a third lip insertable through a first channel opening of an adjacent modular panel and abutable with a second lip of the adjacent modular panel of like variety;

wherein the third lip abuts the second lip of the adjacent modular panel to removeably hold the modular panel and adjacent panel together in a co-linear orientation.

84. A corner post for coupling two panels together in a generally perpendicular orientation, comprising:

at least two post walls oriented generally perpendicularly to each other;

each post wall including a post wing extending from the post wall and toward each other.

85. The post of claim 84, wherein the post wings extend generally perpendicularly with respect to the respective post walls.

86. The post of claim 84, wherein the post walls are rectilinear and connect to form a generally L-shaped configuration.